ABSTRACT OF THE INVENTION

The present invention provides certain cationic lipids containing stigmasterol, ergosterol and cholic acid groups. Compounds of the invention are useful, either alone or in combination with other lipid aggregate-forming components (e.g., DOPE, DOSPA, DOTMA or cholesterol) for formulation into liposomes or other lipid aggregates. Such aggregates are cationic, and able to form stable complexes with anionic macromolecules, such as nucleic acids. The cationic lipids of the invention are useful in methods of transfecting cells, particularly to introduce nucleic acids into cells. The invention also related to kits for the preparation of lipid aggregates and to lipid aggregates and compositions for transfection of cells.